Phase II FastLane Step-by-Step Instructions

Remember you Must submit a Phase I Final Report before submitting a Phase II proposal. The Phase I Final Report is uploaded in the Phase II proposal.

To ensure that your SBIR/STTR Phase II proposal uses the correct FastLane forms please reference: Phase II Submission Requirements/

For Assistance Please Call the FastLane Help Desk at 1-800-673-6188.

To get started follow the steps outlined below:

- 1. Go to the FastLane home page http://www.fastlane.nsf.gov
- 2. Select the **Proposal, Awards & Status link**
- 3. Fill in Log In information -- (into the PI/CO-PI Login box) **Note: The PI for the proposed Phase II must start the proposal.**
 - Last Name
 - NSF ID
 - Password
 - Click on the **Log-in** button



4. The next screen will be the **Principal Investigator (PI)/Co-Principal Investigator (CO-PI) Management**. Select the **Proposal Functions** link

Principal Investigator(PI)/Co-Principal Investigator(Co-PI) Management

What Do You Want To Work On?

Proposal Functions

Award And Reporting Functions

Change Pl Information

- 5. The Proposal Functions screen will give you several options.
 - Select the Proposal Preparation link
 Principal Investigator(PI)/Co-Principal
 Investigator(Co-PI) Management



6. The **Principal Investigator (PI) Information** screen will appear. Check the PI information for accuracy. You may choose to update or edit PI information by selecting the **Edit PI Information** button, or- You may choose to prepare your proposal by selecting the **Prepare Proposal** button.

Principal Investigator (PI) Information



7. Once you select to prepare your proposal the **Proposal Actions** Screen appears

	emporary Proposals in orary Proposal # - Title		
6963171 - STTR I 6963170 - SBIR P			
6963167 - SBIR P	10_TEST_PROPOSAL hase I: SBIR Phase 1 hase I:5th SBIR Proposal		•
Edit Delete Check	Save as Template	Allow SRO Access	Proposal PIN
Print	Submit SBIR	Submit STTR	

Scroll down past the **Temporary Proposals in Progress** section to the **New Proposals** section - Click on **SBIR Phase II** button or the **STTR Phase II** button (located under the Create New Proposal header).

	Create Blank Proposal	Use Template	
SBIR Phase I	SBIR Phase II	STTR Phase I	STTR Phase

8. The **SBIR/STTR Phase I Selector** screen appears. **Important!** You will see a listing of your company's SBIR/STTR Phase I Awards in which you serve as PI.

Highlight the SBIR/STTR Phase I award for which you are submitting a Phase II proposal from the SBIR/STTR Phase I Awards.

For a PI change between Phase I and Phase II **NO Awards will appear**; type in the Phase I Award Number - Scroll down and click on the **Use** button. This will automatically assign the person who started the proposal in FastLane to be assigned as the new PI for the Phase II proposal.

SBIR Phase I Selector
uing a new SBIR Phase II Proposal. The box below includes all of your current SBIR Phase I list and click the " Use " button to start a SBIR Phase II proposal. All relative information will be passed on to your SBIR phase II proposal.
SBIR Phase I Awards (No current awards)
or if your Phase I award does not appear on the list, type the award number from your Phase I vided below. Remember that SBIR Phase II proposals must be based on a prior SBIR Phase I Award. Phase I Award number
Use ReSet GoBack

9. The **Form Preparation** screen appears. You will see at the top of the page **Forms for Temp Proposal** #. This number allows you to work on your proposal. When your FastLane Contact/SPO finally submits your proposal, your proposal will be assigned an official NSF proposal number.

Form	s for Temp.	Propos:	al #9016849	
	Form P	reparatio	on	
To prepare a	a form, click on	the appro	priate button below.	
Form	Saved		Form	Saved
Cover Sheet	02/18/09	GO	Project Summary	
Table of Contents	N/A	GO	Project Description	
References Cited		GO	Biographical Sketches	
Budgets (Including Justification)		GO	Current and Pending Support	
Facilities, Equipment, and Other Resources		GO	Supplementary Docs	
gle Copy Documents				
GO PI/Co-PI Information	N/A	GO	Add/Delete Non Co-PI Senior Personnel	N/A
GO Deviation Authorization(if applicable)		GO	Change PI	
GO List of Suggested Reviewers (optional)	N/A	GO	Link Collaborative Proposals	
GO Additional Single Copy Documents				
	Go	Back		
equently Asked Questions About FastLane P				

The Form Preparation Screen is the control center for your proposal development. All of the *GO* buttons move to you the different modules that you will need to complete in order to prepare your Phase II proposal. It is strongly advised that you prepare each of the sections offline and then upload the sections to each of the modules. The Budget is the only section that you will need to data enter the information directly into FastLane, although, the budget justification(s) should be prepared offline and uploaded into the Budget Justification module.

9.A. Click on the GO button to begin the **Cover Sheet**. The Cover Sheet has been divided into 4 sections. To complete the cover you must complete the 4 sections.

	Cover Shee	t Components Form	1
	The NSF Cover Sheet within	FastLane has been divided into 4 sections:	
	 Awardee/Performing/ 	Research Organization ent / Solicitation Number Selection ion	
	To complete a section, click on the Go	button, and click on OK to save the data.	
GO Awardee/Perf	forming/Research Organization Selection	1	
	Awardee Organization	Performing/Research Organization	
	NSF	NSF	
Address	Arlington, VA 222302000	Arlington, VA 222302000	
10200747887027010811017	US	US	
Inst. Code	4102852000	4102852000	
DUNS#	074811805		
GO Program Anno	ouncement / Solicitation / Program Desc	ription No., or In response to Grant Proposal Guide (GPG).	
	Announcement has been selected yet, ect one or the GPG prior to filling out ti	ne rest of the Cover Sheet	
GO NSF Unit Cor No NSF Units	nsideration s have been selected yet.		
	ect one prior to filling out the rest of the	Cover Sheet	
GO *Remainder of	the Cover Sheet		
	Gi	9 Back	

*First Cover Sheet Go Button: Awardee/Performing/Research Organization Selection.

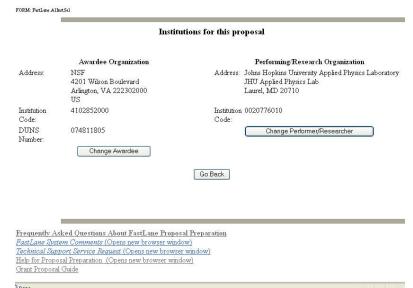
Awardee Organization Info is pre-filled from the PI information

Note: STTR proposers must add Research Organization information. Click on the **GO** button for **Awardee/Performing/Research Organization**. Then click on the **Change Performer/Researcher** button.

Hint: Type a few characters of the Institution's Name. Click the *Contains* button and then click on *Locate Performer/Researcher* button (if you can not find the institution you are looking for, please contact the FastLane Help Desk at 1-800-673-6188).

Highlight the desired institution from the list by clicking on it; then click on the **Select Performer/Researcher** button. A message will appear **Performing Institution Changed** click **OK** button. Once all information is provided for this section, click on the **GO BACK** button to return to the **Forms for Temp Proposal #** screen and the **Forms Preparation screen**.

Click **Go** button next to Cover Sheet again.



The Awardee/Performing/Research Organization Selection Screen

* Second Cover Sheet Go Button: Program Announcement / Solicitation / Program Description (all information should be pre-populated)

The Program Announcement/ Solicitation Number on which you received your Phase I grant should appear automatically. However, if it does not appear, click the ${\it GO}$ button next to Program

Announcement/Solicitation/Program Description No. It is important that the Phase I Solicitation number is used.

Follow the directions below:

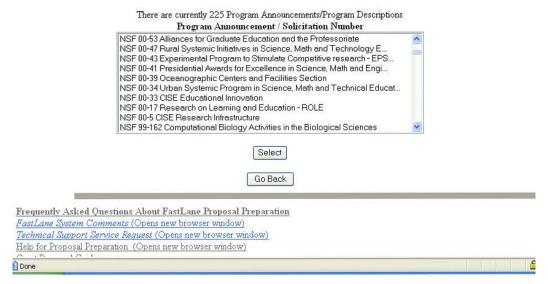
Find the Phase I solicitation within the Program Announcement/Solicitation Number list, **highlight the program announcement number** and click on the **Select** button.

Highlight the Program and click on the **Select Program** button.

You should receive a message that **The Unit was added**. This program is associated with only one division. Click on the **Go Back** button.

Program Announcement / Solicitation Number Selection

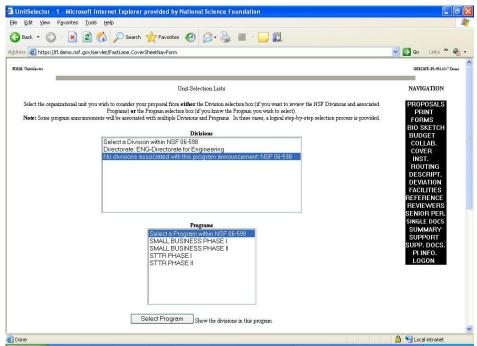
Select a Program Announcement or, if not in response to a program announcement, choose 'NSF 09-1 GPG: Not in response to a program announcement is within multiple divisions or programs, the next page will allow you to select from the associated divisions and programs. If the program announcement is associated with only one division and program, the unit of consideration will automatically be selected.



Program Announcement / Solicitation Number Screen (Note – you shouldn't have to use this drop-down menu; but if this information is blank – Select the Phase I Solicitation Number.)

*Third Cover Sheet Go Button: NSF Unit Consideration - Current List of selected NSF UNITS: Note: All the information should be pre-populated. If more than one NSF Unit appears on the Current List of related NSF Units. Click the GO button for NSF Unit Consideration and scroll down to the Current List of selected NSF Units. Highlight the correct one and click on Move to Top. Highlight incorrect one and click on Remove. Click on Go Back to return to the Cover Sheet Components Form.

Note: If you need to change the Unit of Consideration, click **Go** button next to **NSF Unit Consideration**. Choose the correct program and click on the **Select Program** button. On the next page, you will see this message: **The Unit was added. This program is associated with only one division**. If more than one unit appears follow the same instructions above. You should highlight the correct one and click on **Move to Top**. Highlight incorrect one and click on **Remove**. Click on **Go Back** to return to the **Cover Sheet Components Form**.



NSF Unit Consideration - Current List of selected NSF UNITS

1 1 1 1 1 1 1 1	Current List of selected NSF Units:
you nave selected more than one unit, make st	re that the most suited is listed first. This top unit must be related to the program announcement. Highlight your primary choice and click the "Move to Top" button.
	ENG -SMALL BUSINESS PHASE II
	Move to Top Remove
	Go Back
quently Asked Questions About FastLane	Pronosal Prenaration
stLane System Comments (Opens new browse	r window)
<i>chnical Support Service Request</i> (Opens new b Ilp for Proposal Preparation (Opens new brov	
ant Proposal Guide	
TSA	
ARE	

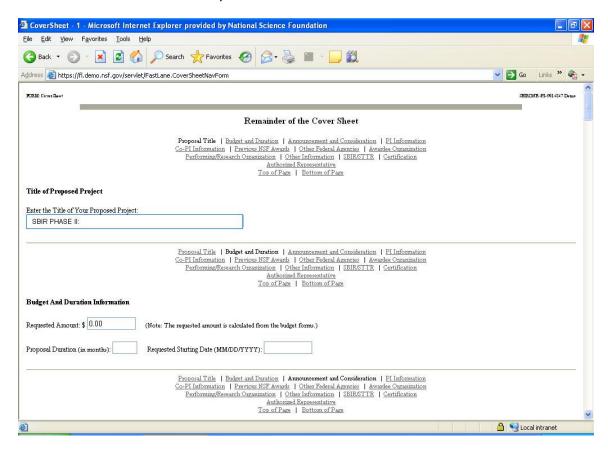
*Fourth Cover Sheet Go Button: Remainder of the Cover Sheet

Click the **GO** button for the **Remainder of the Cover Sheet.** Provide the required information to complete the cover sheet. For example, the following information is required:

Title of Proposed Project. All proposal titles **MUST** start with **SBIR Phase II**: or **STTR Phase II**: Do not remove the pre-populated text.

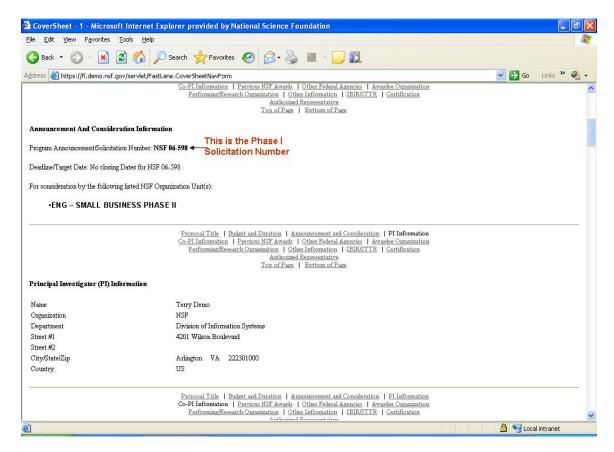
Budget And Duration Information section. Four items are requested. Enter the project amount in the **Requested Amount** box, e.g. projects cannot exceed

\$500,000. Place 24 months in the **Proposal Duration** box, e.g. if you are planning to be on an accelerated project schedule, please talk to your Program Manager first. In the **Requested Stating Date** box put a date six months from the submission date. Note – this time will vary based on the Pre-Award Audit results.



Announcement And Consideration Information section: This section should show the Program Announcement/Solicitation Number pre-populated.

The Deadline/Target Date: The deadline date information is found in your Phase I Award Letter or on the Phase II Proposals Submission Deadlines web site: http://www.nsf.gov/eng/iip/sbir/phase ii sub date.jsp. Remember you only have two opportunities to submit, depending on your award date. Check with your Program Manager if you are unsure.



For consideration by the Following listed Organization Unit(s):

This section should show the information you provided earlier. Double check to make sure what you entered earlier is correct.

Principal Investigator (PI) Information section: This section should show all the information you entered earlier on the PI screen.

Co-Principal Investigator (Co-PI) Information section. This section should show all the information you entered earlier. This section should only have information for STTR proposals. Otherwise this section should have the following message pre-populated: **No Co-PI's are allowed for this proposal.**

	Top of Page Bottom of Page
Principal Investigator (PI) Information	
Name	Terry Demo
Organization	NSF
Department	Division of Information Systems
Street #1	4201 Wilson Boulevard
Street #2	
City/State/Zip	Arlington VA 222301000
Country	US
	Proposal Title Budget and Duration Announcement and Consideration Pf Information Co-Pf Information Previous NSF Awards Other Federal Agencies Awardse Organization Performing/Research Organization Other Information SBIRNTTR Certification Authorized Representative Top of Page Bottom of Page
Co-Principal Investigator (Co-PI) Information	This section is used only for
No Co-PI's are allowed for this proposal.	STTR Proposals

Information on PI and Co-PI

Previous NSF Award section. The Phase I award number should be pre-populated. Do not check the preliminary proposal or full proposal related to an associated preliminary proposal boxes.

Proposal Title | Budget and Duration | Announcement and Consideration | PI Information

Co-PI Information | Previous NSF Awards | Other Federal Agencies | Awardee Organization

Performing/Research Organization | Other Information | SBIR/STTR | Certification

Authorized Representative

Top of Page | Bottom of Page

	r Federal <i>I</i> ave or plan				sting of a	III the other	Federal agencies
		1007	o-PI Information F	revious NSF Awards h Organization Ot Authorize	Other Federal Ag her Information : d Representative	onsideration PI Informencies Awardee Organic SBIR/STTR Certification	zation
Other Fed	leral Agencies			Top of Page	Bottom of Page		
If this prop	oosal is being submitted	to another Federal Ag	ency (FA), please typ	pe a reasonable abbre	viation (maximum o	of 10 characters) for each	agency in a blank space below.
6.	7.	8.	9.	10.			

If this is a Full Proposal and it is related to an associated preliminary proposal, please enter that preliminary proposal number here: 💌

Listing of All Federal Agencies

Awardee Organization Information section: This section have your Organization name, address, and Organization Code (this a NSF code assigned to you organization). All of this information should be pre-populated. Employer Identification Number (**EIN**) Taxpayer Identification Number (**TIN**) must be provided.

Under the Check all that apply to the Awardee Organization (see GPG for Definitions) you should always check the following two boxes:

✓ For Profit

Previous NSF Award

Then select the previous Award Number:

If this is a preliminary proposal then check here:

✓ Small Business

If you company is a Minority Business check the box and if you are a Woman-owned Business check that box as well.

Proposal Title | Budget and Duration | Announcement and Consideration | PI Information | Co-PI Information | Previous NSF Awards | Other Federal Agencies | Awardse Organization | Performing/Research Organization | Other Information | SBIR/STTR | Certification Authorized Representative | Top of Page | Bottom of Page

Awardee Organization Information

Organization: NSF
Organization SSF
Address: 4201 Wilson Boulevard
Arlington, VA 222302000
US

1Employer Identification Number 1 Taxpayer Identification Number

Check all that apply to the Awardee Organization (See GPG for Definitions):
For Profit
Minority Business
Women-owned Business

Awardee Organization Information

Other Information section. Check the appropriates box or boxes if the proposal includes any of the items listed below:

	Co-PI Information Previous NSF Awards Other Federal Agencies Awardse Organization Performing/Research Organization Other Information SEIR/STTR Certification Authorized Representative Top of Page Bottom of Page
Other Information	
heck Appropriate Box(es) if this proposal i	ncludes any of the items listed below:
Beginning Investigator (GPG 1G 2)	
Disclosure of Lobbying Activities (GPG II	(C1s)
🔲 Proprietary & Privileged Information (GF	GID& HClA)
Historic Places (GPG ΠC 2 j)	
EArly-concept Grants for Exploratory F	Research (HAGHR) (GPG II D.2)
🔲 Grants for Rapid Response Research (RA	PID) (GPG II D1)
Vertebrate Animals (GPG ΠD.)	
IACUC App. Date (MOMEDD/YY)	
PHS Animal Welfare Assurance Number	
Human Subjects (GPG II D.7)	
Exemption Subsection	
and the second	
IRB App. Date (MM/DD/YY)	
Human Subjects Assurance Number	

Small Business Innovation Research section. Provide complete information for:

Small Business Innovation Research SBIR/STTR Phase II Topic: SBIR/STTR Phase II Subtopic Letter(s), required: The Small Business Concern Certifies That: 1. It is a small business as defined in the solicitation. O YES O NO 2. It qualifies as a socially and economically disadvantaged business as defined in the solicitation (FOR STATISTICAL PURPOSES ONLY) 3. It qualifies as a women-owned business as defined in the solicitation (FOR STATISTICAL PURPOSES ONLY) ONO 4. SBIR: A minimum of one-half of the research will be performed by this firm in Phase II. STTR: It will perform at least 40 percent of the work and the collaborating research institution will perform at least 30 percent of the work as described in the O YES O NO 5. The primary employment of the Principal Investigator (PI) will be with this firm at the time of award and during the conduct of the research. 6. It will permit the government to disclose the title and technical abstract page, plus the name, address and telephone number of a corporate official, if the proposal does not result in an award, to parties that may be interested in contacting the small business for further information or possible investment. ONO 7. It will comply with the provisions of the Civil Rights Act of 1964 (P.L. 88-352) and the regulations pursuant thereto. O YES 8. It has received Phase II awards from the Federal Government. If "yes" provide a company commercialization history in the supplementary documents module. O YES 9. It is located in a Historically Underutilized Business Zone (HUBZone) as verified by the Small Business Administration (to verify HUBZone participation go to http://map.sba.gov/hubzone/init.asp.). O YES Company Officer Information(For Business and Financial Matters): Company Officer Name: Company Officer Title: Company Officer Telephone Number: (Ex: 8885551212) Other Information: President's Name: (Ex 1994) Number of Employees (Including Parent, Subsidiary, and Predecessor) Current Number Of Employees Average Number Of Employees For Previous 12 Months Research Institution Investigator Provide only if STTR Research Institution: ZT Solar, Inc. Research Investigator Name: Research Investigator Phone Number: Proprietary Notice: See solicitation for instructions concerning proprietary information.

Check here if proposal contains proprietary information.

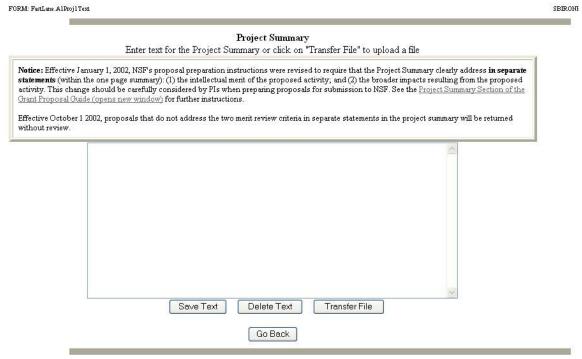
Click the **OK** button. FastLane returns the following message - **Your Cover Sheet has been saved**. Click on **OK** button to return to the Form Preparation Screen.

9.B. Click on **GO** button to prepare your **Project Summary**.

The **Project Summary** screen appears. The SBIR and STTR Phase II Project Summary have **four required sections** (Intellectual Merit, Broader/Commercial Impact, Key Words, and Topic/Subtopic). The first paragraph of the Project Summary MUST begin with, This Small Business Innovation Research Phase II project or This Small Business Technology Transfer Phase II project.

You have three options to prepare the Project Summary (Use the Text Box in FastLane and cut and paste your Project Summary, or directly enter the text into the text box or Upload a PDF file). **Note- document formatting is lost when using the text box.** If you choose to cut and paste directly into Project Summary by using your own word processing package; make sure you check the spelling. If you choose to type directly into the text box (spell check is not available and this method is strongly discouraged). The final option (and the most recommended) is that you prepare your Project Summary by attaching a file. For more information on the type of files that can be attached and uploaded, please click on the following link: https://www.fastlane.nsf.gov/A1AcceptableFileExten sions.html (for more detailed information on how to convert a file to PDF and important tips please go to: FastLane PDF Creation Hints and Pointers

https://www.fastlane.nsf.gov/NSFHelp/flashhelp/fastlane/FastLane Help/fastlane help.htm#create pdf files introduction.htm.) After uploading a file, click on the **Go** Back button to return to the forms page.



9.C. Click **Go** button to prepare the **Project Description** (five parts are required for this section:

- Part 1. Results of the Phase I Project
- Part 2. Phase II Technical Objectives, Approach, and Work Plan
- Part 3. Organizational Information
- Part 4. Consultant and Subaward agreement

Prepare your Project Description Contents with the Required Parts. **Reminder, this section cannot exceed 15 pages!** When the PDF file is uploaded, then Click the **Go** Back button to return to the Form Preparation Screen. Please reference the SBIR/STTR Phase II requirements: http://www.nsf.gov/eng/iip/sbir/phase ii.jsp.

You must have the Adobe Acrobat viewer installed on your computer in order to display PDF files. If you do not have the viewer installed, refer to Using Adobe Acrobat Reader for Printing for information on locating and installing the viewer.

Notice: Effective January 1, 2002, NSF's proposal preparation instructions were revised to require that the Project Description must describe as an integral part of the narrative, the broader impacts resulting from the proposed activities. This change should be carefully considered by PIs when preparing proposals for submission to NSF. See the Project Description Section of the Grant Proposal Guide (opens new window) for further instructions.

Examples illustrating activities likely to demonstrate broader impacts are available electronically on the NSF website at: http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf (opens new window).

Project Description

NEW! File uploads no longer have to be in PDF format!

In addition to PDF files, users can now upload a variety of word-processor files and PostScript files. These files will automatically be converted to PDF format.

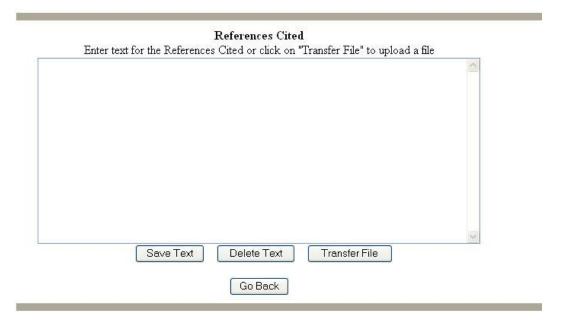
Follow this link for a list of <u>Supported file formats</u> (Opens new window).

Follow this link for <u>New Upload Instructions</u> (Opens new window).

Enter the name and location of the file to upload

or click on the **Browse** button to select the file to upload
Browse...
Upload File

9.D. Click the *Go* button to prepare the **References Cited** section. Provide a comprehensive listing of relevant sources. You can directly enter the references into the text box or you can transfer a file. It is recommended that you do the file transfer. When this section is completed, then click the *Go Back* button to return to the Form Preparation Screen.



9.E. Click the *GO* button to prepare the **Biographical Sketches** section. Provide relevant biographical information for the PI and key personnel. Include information on present and past employment, education (highest degree and year), and professional experience. Also include relevant biographical information for subawardees and consultants. When this section is completed, then Click the *Go* **Back** button to return to the Form Preparation Screen. **Note-** Bios may be uploaded individually or as one file under the PI.

File" butto	마리 전 프라이지 않는데 이렇게 되었다면 이번에 되는 사람이 되었다. (1912년 전 1912년 전 1	outton to select the ons.	file and then click on the "Uploa
Go Terry Demo	PI	Nothing	
Go Lums Lums	Senior Person	Nothing	
	Go Back		

9.F. Click the **Go** button to prepare the **Current and Pending Support** section. Note: You can upload all Current and Pending support items for your proposal as one PDF file by selecting the PI's name and either editing an existing form or creating a new one. When this section is completed, then click the **Go Back** button to return to the Form Preparation Screen.

Current and Pending Support

Note: You can upload all Current and Pending support items of your proposal as one PDF file by selecting the PI's name and either editing an existing form or creating a new one.

Existing Support Forms	Current PI, Co-PIs, and Senior Personnel
No forms have been created yet.	Terry Demo○ Lums LumsNew Form

Go Back

9.G. Click the *Go* button to prepare the *Facilities, Equipment and other Resources* section. Provide a description that specifies significant equipment, instrumentation, computers, and physical facilities necessary to demonstrate that the company has or has access to the necessary resources to perform the tasks outlined in the project description.

Facilities, Equipment, and Other Resources

Instructions: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies Laboratory: Clinical: Animal: Computer: Office: Other: MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of the items. OTHER RESOURCES: Provide any information describing the other resources available to the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations

Phase II Budget Section

Before proceeding to the Budget Form add the necessary personnel for the budget and/or subawardee budget. Click the *GO* button entitled Add/Delete Non Co-PI Senior Personnel. The Edit List of Senior Persons on Proposal screen will appear. Click on Add/Modify Non Co-PI Senior Personnel to Proposal button. The individuals you add will be available for inclusion on the budget for the company, subaward, or STTR Research Institution budgets. Note – Senior personnel

Delete Text

Go Back

Transfer File

Save Text

appear automatically in the Bio Sketches and Current & Pending Support, but they MUST be Added to the Budget.

	Add/Delete Non Co-Principal Investigator (Co-PI) Senior Personnel Assigned to Proposal
o Delete a Non Co-PI Seni	or Personnel assigned to Proposal #9016867 select the person's name from the list below and press the 'Delete Non Co-PI Senior Person From Proposal' button.
	Select a name to remove as a Senior Personnel. Lums Lums
	Delete Non Co-PI Senior Person From Proposal
o Add a new Non Co-PI Sei	nior Personnel to proposal #9016867, type the name of the person in the fields below and click the 'Add Non Co-PI Senior Person to Proposal' button.
o Add a new Non Co-PI Ser	
o Add a new Non Co-PI Sei	Non Co-PI Senior Person to Proposal' button
o Add a new Non Co-PI Sei	Non Co-PI Senior Person to Proposal' button. Enter the first name, middle initial, and last name.

9.H. Click the *GO* button to prepare the **Budget(s).** - The Project Budget Screen will appear. The company name should be highlighted; then Click on **Add Year** button <Year 1 should be highlighted>; then Click **Add** button. FastLane will return to the Project Budget Screen. Click on the hyperlink (under the Year heading)

Provide information for all sections:

- **A. Senior Personnel** (add key/senior personnel) and provide the number of calendar months and proposed cost.
- **B. Other Personnel** (provide information on personnel in the categories listed) provide the number of calendar months and proposed cost.
- **C. Fringe Benefits** (provide a description of the fringe benefits for Senior Personnel and Other Personnel.)
- **D. Equipment** (provide a description of the equipment and the dollar amount.)
- **E. Travel** (two trips are required for the SBIR/STTR Grantees Conference a realistic estimate is \$2000 each.)
- **F. Participating Support Costs** (SBIR/STTR does not use this budget line item.)
- **G. Other Direct Costs** (this includes the following:
 - G.1. Materials and Supplies
 - G.2. Publication Costs/Documentation/distrib
 - G.3. Consultant Services
 - G.4. Computer (ADPE) Services
 - G.5. Subcontracts FOR SUBCONTRACTS OR STTR RESEARCH INSTITUTIONS separate BUDGETS are required.

- **H. Total Direct Costs** (this is the total of items A through G)
- I. Indirect Costs (cannot exceed 150%)
- J. Total Direct And Indirect Costs
- **K. Fee** (If requested; maximum equals 7% of line item J.)
- L. Total Cost and Fee (this is the total cost of the proposal).Click on the Calculate
- & Save button.

9.I. Budget Justification section. NOTE -- All budget line items MUST be explained To complete the budget justification page; Click on the **Budget Justification** button. Prepare a detailed Budget Justification for both the Company and if applicable, the Research Institution and/or Subawardee. Cut and Paste the budget justification into the text box, or type directly into the text box, or Upload a PDF file.

Click the **Go** Back button once all data is supplied. You will return to the Project Budget Screen; select the **Go** Back button once again to return to the Form Preparation.

Reference the Budget and Budget Justification Examples. These examples provide you with the level of detail we required for all proposals. Too much information is better than not enough. If you have questions regarding the budget preparation call the Program Manager for guidance and clarification.

					SE ONL	Y
GANIZATION PROPOS					URATIO	ON (months
abc inst					roposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		A۱	WARD N	Ю.		
Terry Demo						
A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates		NSF Fund Person-mo		Fur Reques prop	nds sted By	Funds granted by NS (if different)
(List each separately with title, A.7. show number in brackets)	CAL	ACAD	SUMR			
1. Terry Demo - Pl	4.00				40,000	\$
2. Frederick Scott - Engineer	1.50	0.00	0.00		15,000	
3. Joseph Smith - Enqineer	1.50	0.00	0.00		15,000	
4.						
5.						
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00		_	0	
7. (3) TOTAL SENIOR PERSONNEL (1 - 6)	7.00	0.00	0.00		70,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00			0	
2. (2) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	2.00	0.00	0.00		3,000	
3. (0) GRADUATE STUDENTS					0	
4. (0) UNDERGRADUATE STUDENTS					0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					73,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEED	110 05 0	200)			73,000	
Miniature Spectrometer			6,500			
**************************************			7,500		÷	
TOTAL EQUIPMENT		4.			14,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	SSIONS	3)			2,000	
TOTAL EQUIPMENT	SSIONS	·)				
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS	SSIONS	·)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS S. 0	SSIONS	·)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 0	SSIONS	·)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 0	SSIONS	*)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 0 0	SSIONS				2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 0 0 0	SSIONS)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 0. Expression of the control	SSIONS)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (D) TOTAL PARTICIPANT COSTS	SSIONS	(i)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER 0 D TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS	SSIONS	(i)			2,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 D TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES	SSIONS	()			2,000 0 0 3,500	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS 6. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	SSIONS))			2,000 0 0 3,500 0	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (D) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES	SSIONS				2,000 0 0 3,500 0 5,710	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES	SSIONS				0 3,500 0 5,710	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS	SSIONS			-	2,000 0 3,500 0 5,710 0 85,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER	SSIONS				2,000 0 0 3,500 0 5,710 0 85,000 50,000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 0. 4. OTHER (D) TOTAL PARTICIPANT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS	SSIONS				2,000 0 3,500 0 5,710 0 85,000 50,000 44,210	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (1) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G)	SSIONS				2,000 0 3,500 0 5,710 0 85,000 50,000 44,210	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0. 3. SUBSISTENCE 0. 4. OTHER 0 0 4. OTHER 0 0) 7. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	SSIONS			1 2	2,000 0 3,500 0 5,710 0 85,000 50,000 44,210	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS			1 2	2,000 0 3,500 0 5,710 0 85,000 50,000 44,210 33,210	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (D) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 6&A (Rate: 30.7400, Base: 73000) TOTAL INDIRECT COSTS (F&A)	SSIONS			1 2	2,000 0 3,500 0 5,710 0 85,000 50,000 44,210 33,210	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 73000) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A)	SSIONS			1 2 2	2,000 0 3,500 0 5,710 0 85,000 44,210 33,210 22,440 55,650	\$
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS			1 2 2	2,000 0 3,500 0 5,710 0 85,000 44,210 33,210 22,440 22,440 55,650 17,895	\$
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS		7,500	1 2 2	2,000 0 3,500 0 5,710 0 85,000 44,210 33,210 22,440 22,440 17,895 73,545	\$
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER (D) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 73000) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H+I) K. FEE (IF REQUESTED MAXIMUM = 7% OF J) L. TOTAL COST AND FEE (J+K)	SIONS		7,500	1 2 2	2,000 0 3,500 0 5,710 0 85,000 50,000 44,210 33,210 22,440 73,545	

1*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

ORGANIZATION abc inst PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Terry Demo A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets) 1. Terry Demo - PI 2. Frederick Scott - Engineer		SUMMARY YEAR 2 PROPOSAL BUDGET				
abc inst PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Terry Demo A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with tittle, A.7. show number in brackets) 1. Terry Demo - PI						
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Term Demo A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets) 1. Terry Demo - PI				Proposed	ON (months	
Terry Demo A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets) 1. Terry Demo - Pl		A)	WARD N			
SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets) 1. Terry Demo - PI		1850				
(List each separately with title, A.7. show number in brackets) 1. Terry Demo - Pl		NSF Func Person-mo	led nths	Funds	Funds	
	CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by N (if different	
2 Frederick Scott - Engineer	4.00	0.00	0.00		\$	
4. I IGUGITOR GOUR - LIIGIIIGGI	3.00	0.00	0.00			
3. Joseph Smith - Engineer	2.50	0.00	0.00	18,750		
4.						
5.						
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE	0.00	0.00	0.00	0		
7. (3) TOTAL SENIOR PERSONNEL (1 - 6)	9.50	0.00	0.00	81,250		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0		
2. (4) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	4.00	0.00	0.00	12,000		
3. (0) GRADUATE STUDENTS		7,700		0		
4. (0) UNDERGRADUATE STUDENTS				0		
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0		
6. (() OTHER				0		
TOTAL SALARIES AND WAGES (A + B)				93,250		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				93,250		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEE	JING SE C	200.)				
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSS	ESSIONS)		2,000		
2. FOREIGN				0		
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ 0						
2. TRAVEL 0						
3. SUBSISTENCE						
4. OTHER 0						
4. OTHER				0		
4. OTHER						
4. OTHER				5,000		
4. OTHER 0 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				5,000 0		
4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES				5,000 0 5,710		
3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES				5,000 0 5,710		
3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS				5,000 0 5,710 0 30,000		
3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER				5,000 0 5,710 0 30,000 10,000		
4. OTHER 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS				5,000 0 5,710 0 30,000 10,000 50,710		
3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G)				5,000 0 5,710 0 30,000 10,000		
3. SUBSISTENCE 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)				5,000 0 5,710 0 30,000 10,000 50,710		
3. SUBSISTENCE 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250)				5,000 0 5,710 0 30,000 10,000 50,710 145,960		
3. SUBSISTENCE 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250) TOTAL INDIRECT COSTS (F&A)				5,000 0 5,710 0 30,000 10,000 50,710 145,960		
3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H+I)				5,000 0 5,710 0 30,000 10,000 50,710 145,960 28,665 174,625		
3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H+1) K. FEE (IF REQUESTED MAXIMUM = 7% OF J)				5,000 0 5,710 0 30,000 10,000 50,710 145,960 28,665 174,625 12,223	5	
3. SUBSISTENCE 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H+1) K. FEE (IF REQUESTED MAXIMUM = 7% OF J)				5,000 0 5,710 0 30,000 10,000 50,710 145,960 28,665 174,625	\$	
3. SUBSISTENCE (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 1. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H+I) K. FEE (IF REQUESTED MAXIMUM = 7% OF J) L. TOTAL COST AND FEE (J+K)			FOR	5,000 0 5,710 0 30,000 10,000 50,710 145,960 28,665 174,625 12,223	\$	
3. SUBSISTENCE 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) G&A (Rate: 30.7400, Base: 93250) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A) J. TOTAL DIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H+I)	F	INDIR		5,000 0 5,710 0 30,000 10,000 50,710 145,960 28,665 174,625 12,223 \$ 186,848		

2*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

PROPOSAL BUDG					JSE ONL	Y
ORGANIZATION						ON (months
abc inst					Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		A'	WARD N	10.		
Terry Demo						
A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates		NSF Fund Person-mo		Requi	unds ested By poser	Funds granted by N (if different)
(List each separately with title, A.7. show number in brackets)	CAL	ACAD	SUMR			
1. Terry Demo - PI	8.00				80,000	\$
2. Frederick Scott - Engineer	4.50	0.00	0.00	_	37,500	
3. Joseph Smith - Engineer	4.00	0.00	0.00		33,750	
4.				_		
5.	0.00	0.00	0.00			
6. () OTHERS (LIST INDIMDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		154.050	
7. (3) TOTAL SENIOR PERSONNEL (1 - 6)	16.50	0.00	0.00		151,250	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0	
2. (6) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)						
3. (1) GRADUATE STUDENTS	6.00	0.00	0.00	1	15,000 0	
4. (1) UNDERGRADUATE STUDENTS					0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					166,250	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					166,250	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	3)	2		14,000 4.000	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN	ESSIONS	3)			14,000 4,000 0	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ESSIONS	5)			4,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 0 0 0 0 0 0 0 0 0	ESSIONS	5)			4,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN	ESSIONS	5)			4,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	*)			4,000 0 0	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	*)			4,000 0 0 8,500	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	5)			0 8,500 0 11,420	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	(5)			4,000 0 0 8,500 0 11,420 0	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	5)			4,000 0 0 8,500 0 11,420 0 115,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 5. FOREIGN 0 0 0 0 0 0 0 0 0	ESSIONS	(2)			4,000 0 0 8,500 0 11,420 115,000 60,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	(5)			4,000 0 8,500 0 11,420 0 115,000 60,000 194,920	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS				4,000 0 0 8,500 0 11,420 115,000 60,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS				4,000 0 8,500 0 11,420 0 115,000 60,000 194,920 379,170	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS	(1)			4,000 0 8,500 0 11,420 0 115,000 194,920 379,170 51,105 430,275	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	ESSIONS	(3)			4,000 0 8,500 0 11,420 0 115,000 60,000 194,920 379,170 51,105 430,275 30,118	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	ESSIONS				4,000 0 8,500 0 11,420 0 115,000 194,920 379,170 51,105 430,275	\$
1. DOMESTIC (INCL CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 2. FOREIGN 5. FOREIGN 5. STIPENDS 5. STIPENDS 5. STIPENDS 6. STIPENDS 6. STIPENDS 7. STIPEN	ESSIONS			\$	4,000 0 8,500 0 11,420 0 115,000 60,000 194,920 379,170 51,105 430,275 30,118 460,393	\$
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 5. FOREIGN 0 0 0 0 0 0 0 0 0	Essions			\$ NSF US	4,000 0 8,500 0 11,420 0 115,000 60,000 194,920 379,170 51,105 430,275 30,118	

C*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

SUMMARY PROPOSAL BUDG				USE ONL	Υ	
RGANIZATION PROPOSA					DURATIO	ON (months
Johns Hopkins University		Ja s			Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		A'	WARD N	IO.		
Randolph Macon						
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates		NSF Fund Person-mo		Req	Funds uested By	Funds granted by No (if different)
(List each separately with title, A.7. show number in brackets)	CAL	ACAD		р	roposer	
1. Randolph Macon - Professor	2.00				20,000	\$
2. Thomas Payne - Assoc. Professor	4.00	0.00	0.00		18,000	
3.						
4.						
5.						
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00			-	0 000	
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	6.00	0.00	0.00		38,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00			0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00		0 000	
3. (2) GRADUATE STUDENTS					20,000	
4. (0) UNDERGRADUATE STUDENTS					0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 6. (0) OTHER					<u>0</u>	
TOTAL SALARIES AND WAGES (A + B)			_		58,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					30,000	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					58,000	
	SSIONS)			2,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN	SSIONS	i)				
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE	SSIONS	()			2,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS	()			2,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS	SSIONS	(1)			2,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES	SSIONS	()			2,000 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	SSIONS	(1)			2,000 0 0 15,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES	SSIONS				2,000 0 0 15,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES	SSIONS	()			2,000 0 0 15,000 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS	SSIONS	()			2,000 0 0 15,000 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER	SSIONS				2,000 0 0 15,000 0 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS	SSIONS				2,000 0 0 15,000 0 0 0 10,000 25,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G)	SSIONS				2,000 0 0 15,000 0 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	SSIONS				2,000 0 0 15,000 0 0 0 10,000 25,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 5. 0 2. TRAVEL 0. 0 3. SUBSISTENCE 0. 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL OTHER DIRECT COSTS I. INDIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) (Rate: , Base:)	SSIONS				2,000 0 15,000 0 0 0 10,000 25,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) (Rate:, Base:) TOTAL INDIRECT COSTS (F&A)	SSIONS				2,000 0 15,000 0 0 0 10,000 25,000 85,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS				2,000 0 15,000 0 0 0 10,000 25,000 85,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS				2,000 0 15,000 0 0 0 10,000 25,000 85,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS			\$	2,000 0 15,000 0 0 0 10,000 25,000 85,000	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS				2,000 0 15,000 0 0 0 10,000 25,000 85,000 0 85,000	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS			NSF U	2,000 0 15,000 0 0 0 10,000 25,000 85,000	

1*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

SUMMARY YEAR PROPOSAL BUDGET				R NSF USE ONL	Υ
ORGANIZATION	OPOSAL		ON (month:		
Johns Hopkins University				Proposed	_
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		A)	WARD N		
Randolph Macon		1850			
A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates		NSF Func Person-mo	led nths	Funds	Funds
(List each separately with title, A.7. show number in brackets)	CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by N (if different
Randolph Macon - Professor	0.50	0.00	0.00	\$ 5,000	\$
2. Thomas Payne - Assoc Professor	2.00	0.00	0.00	9,000	
3.				- "	
4.					
5.					
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	700000	
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	2.50	0.00	0.00	14,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00		
3. (2) GRADUATE STUDENTS				10,000	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER			_		
TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				24,000	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				24,000	
2. FOREIGN					
1. STIPENDS \$0				0	
1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0					
1. STIPENDS \$				0	
1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS				0	
1. STIPENDS \$					
1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES				0 4,000	
1. STIPENDS \$				0 4,000 0	
1. STIPENDS \$				4,000 0 0	
1. STIPENDS \$				4,000 0 0	
1. STIPENDS \$				4,000 0 0 0	
1. STIPENDS \$				4,000 0 0 0 0	
1. STIPENDS \$				0 4,000 0 0 0 0 0 4,000	
1. STIPENDS \$				0 4,000 0 0 0 0 0 4,000	
1. STIPENDS \$				0 4,000 0 0 0 0 0 4,000 30,000	
1. STIPENDS \$				4,000 0 0 0 0 0 4,000	
1. SITENUS \$				4,000 0 0 0 0 4,000 30,000	
1. STIPENDS \$				0 4,000 0 0 0 0 4,000 30,000	\$
1. STIPENDS \$				4,000 0 0 0 0 4,000 30,000 0 30,000 0 s 30,000	\$
1. STIPENDS \$				4,000 0 0 0 0 4,000 30,000	

2*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

			FOI	R NSF	USE ONL	Υ
ORGANIZATION	100 C					ON (month
Johns Hopkins University					Proposed	Grante
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		A)	WARD N	Ю.		
Randolph Macon						
A. SENIOR PERSONNEL: PI/PD, Co-Pl's, Faculty and Other Senior Associates		NSF Fund Person-mo		Rea	Funds juested By	Funds granted by N (if differen
(List each separately with title, A.7. show number in brackets)	CAL	ACAD	SUMR	р	roposer	
Randolph Macon - Professor	2.50	10.00			25,000	\$
2. Thomas Payne - Assoc Professor	6.00	0.00	0.00		27,000	
3.						
4.						
5.						
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00		0.00	-	0	
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	8.50	0.00	0.00		52,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. () POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	-	0	
3. (4) GRADUATE STUDENTS					30,000	
4. (0) UNDERGRADUATE STUDENTS			-		0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (D) OTHER					0 000	
TOTAL SALARIES AND WAGES (A + B)			-		82,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					82,000	
	SSIONS	i)			4,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS	i)				
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 5. FOREIGN 5. STIPENDS 5. STIP	SSIONS	()			4,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS	SSIONS)			4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS	SSIONS)			4,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS	ESSIONS	5)			4,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES	ESSIONS	5)			4,000 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	ESSIONS)			4,000 0 19,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (10) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES	ESSIONS	5)			4,000 0 0 19,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES	SSIONS				4,000 0 0 19,000 0 0 0 10,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS	ESSIONS				0 19,000 0 0	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 5. F	SSIONS				4,000 0 0 19,000 0 0 0 10,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 0 3. SUBSISTENCE 0 4. OTHER 0 (0) TOTAL PARTICIPANT COSTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G)	ESSIONS)			4,000 0 19,000 0 0 0 10,000 29,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS)			4,000 0 19,000 0 0 0 10,000 29,000 115,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 5. FOREIGN 9. F	SSIONS				4,000 0 19,000 0 0 0 10,000 29,000 115,000	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 2. FOREIGN 5. FOREIGN 5. STIPENDS 5. SUBSISTENCE 5. SUBSISTENCE 6. OTHER DIRECT COSTS 6. OTHER DIRECT COSTS 7. STIPENDS 7. STIPENDS 7. STIPENDS 7. STIPENDS 8. STIPENDS 8. STIPENDS 8. STIPENDS 8. STIPENDS 9. STIPEND	SSIONS)			4,000 0 19,000 0 0 0 10,000 29,000 115,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS				4,000 0 19,000 0 0 0 10,000 29,000 115,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	SSIONS			\$	4,000 0 19,000 0 0 0 10,000 29,000 115,000	\$
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN 2. FOREIGN 5. FOREIGN 5. STIPENDS 5. STIPENDS 5. STIPENDS 6. STIPENDS 6. STIPENDS 7. STIPE	SSIONS				4,000 0 19,000 0 0 0 10,000 29,000 115,000 0 115,000	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSE 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$	ESSIONS			NSF U	4,000 0 19,000 0 0 0 10,000 29,000 115,000	•

C*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

Year 1 Budget Justification

A. Senior Personnel

Dr. Terry Demo - PI will work 2 person months on the project at \$20,000 per month for a total of \$40,000 in year 1.

Frederick Scott - Mechanical Engineer will work 1.5 person months at \$7,500 per month for a total of \$15,000 in year 1.

Joseph Smith - Electrical Engineer will work 1.5 person months at \$7,500 per month for a total of \$15,000 in year 1.

B. Other Personnel

2 Technicians will work 1 person month (each) for a total of \$3,000 in year 1.

D. Equipment

A high performance server is needed to carry out complex systems simulations. Readily available commercial offerings of servers do not have the speed and capability to carry out the multiple calculations.

High Performance Server \$6,500 Miniature Spectrometer \$7,500 Quotes from the vendors are available

E. Travel

Attendance to the required NSF Phase II Grantees Conference \$2,000

G. Other Direct Costs

G1. Materials and Supplies Hg source \$750/unit 2 units = \$1500

Sensors \$250/unit 4 units = \$1000

Chemical samples \$200/unit 5 units = \$1000

G3. Consultant Services

The signed consultant agreement is contained in the proposal. Dr. Snow has agreed to work 10 days at the NSF maximum consultant rate of \$571 per day.

G5. Subawards

A subaward budget is to Johns Hopkins University for their work on the high performance computing elements is for \$85,000 for year (see attached subaward budget and justification)

G6. Other

Analytical testing will be provided by XYX Corporation. Each test will cost \$10,000 and will be performed 5 tests the first year for a total of \$50,000

I. Indirect Costs

The indirect cost rate for this project is 30% for salaries and wages (30% * 73,000).

K. Fee

The fee is within the NSF maximum of 7% of the total of direct and indirect costs. \$17,895.

Year 2 Budget Justification

A.Senior Personnel

Dr. Terry Demo - PI will work 2 person months on the project at \$20,000 per month for a total of \$40,000 in year 2.

Federick Scott - Mechanical Engineer will work 3 person months at \$7,500 per month for a total of \$22,500 in year 2.

Joseph Smith - Electrical Engineer will work 2.5 person months at \$7,500 per month for a total of \$18,750 in year 2.

B. Other Personnel

1 Technicians will work 1 person month for a total of \$12,000 in year 2.

E. Travel

Attendance to the required NSF Phase II Grantees Conference \$2,000

G. Other Direct Costs

G1. Materials and Supplies
Hg source \$750/unit 4 units = \$3,000
Sensors \$250/unit 4 units = \$1000
Chemical samples \$200/unit 5 units = \$1000

G3. Consultant Services

The signed consultant agreement is contained in the proposal. Dr. Snow has agreed to work 10 days at the NSF maximum consultant rate of \$571 per day in the second year.

G5. Subawards

A subaward budget is to Johns Hopkins University for their work on the high performance computing elements is for \$30,000 for year (see attached subaward budget and justification)

G6. Other

Analytical testing will be provided by XYX Corporation. One test will cost \$10,000.

I. Indirect Costs

The indirect cost rate for this project is 30% for salaries and wages (30% * 93,250).

K. Fee

The fee is within the NSF maximum of 7% of the total of direct and indirect costs \$13,929.

Subaward Year 1 Budget Justification

A. Senior Personnel

Dr. Randolph Macon - Professor will work 2 person months on the project at \$10,000 per month for a total of \$20,000 in year 1.

Dr. Thomas Payne – Associate Professor will work 4 person months on the projects at \$4,500 per month for a total of \$18,000 in year 1.

B. Other Personnel

2 graduate students will work 6 person months (each) for a total of \$20,000 in year 1.

E. Travel

Attendance to the NSF Phase II Grantees Conference \$2,000 (either Dr. Macon or Dr. Payne will attend)

G. Other Direct Costs

G1. Materials and Supplies Sensors \$250/unit 20 units = \$5,000 Laboratory glassware \$2,500 Chemical samples \$200/unit 20 units = \$4,000 Servo motors \$350/each 10 motors = \$3,500

G6 Other

Analytical testing will be provided by XYX Corporation. Each test will cost \$10,000 and will be performed 1 test the first year for a total of \$10,000

Subaward Year 2 Budget Justification

A. Senior Personnel

Dr. Randolph Macon - Professor will work 0.5 person months on the project at for a total of \$5,000 in year 2.

Dr. Thomas Payne – Associate Professor will work 2 person months on the projects at \$4,500 per month for a total of \$9,000 in year 2.

B. Other Personnel

2 graduate students will work 3 person months (each) for a total of \$10,000 in year 1.

E. Travel

Attendance to the NSF Phase II Grantees Conference \$2,000 (either Dr. Macon or Dr. Payne will attend)

G. Other Direct Costs

1. Materials and Supplies Chemical samples \$200/unit 20 units = \$4,000 **9.J.** Click the *GO* button to prepare the **Supplementary Docs.** Please upload the files. Multiple files can be uploaded. Upload each file separately. The following components make up the Supplementary Docs section:

1. Phase I Final Report. Upload a copy of the Phase I Final Report.

2. Payment Schedule

Payment Schedule for the project or a proposed deviated schedule. If you elect a deviated schedule the Final Payment amount must be 15% of the overall proposed budget.

Payments	Percentage
Initial Payment	25%
2 nd Payment with	
6 month Report	20%
3 rd Payment with	
6 month Report	20%
4 th Payment with	
6 month Report	20%
Final Payment	
with Final Report	15%

3. Project Milestone Chart

Phase II Project Report Milestone Chart

Reporting Period:	From: January 1, 2010	To: December 31, 2011
Total Estimated	\$ 460,393	
Expenditures (this means		
good faith estimate of actual		
expenditures) this		
reporting period		
Cumulative Estimated	\$	
Expenditures (this means		
good faith estimate of actual		
expenditures)		

Gantt Chart Gantt chart portion must show duration and timng of tasks. Indicate a beginning and ending of each task. (See example Gantt Chart.) X= 1 month effort	Estimate Duration for eachTask	Reporting Period 0-6 months	Reporting Period 6-12 months	Reporting Period 12-18 months	Reporting Period 18-24 months
Task 1: Synthesis and Characterization	21 months	^X	XXXXXX	XXXXXX	X

Task 2: Development of the	21	
Tool	months	^X X X X X X X X X X X X X X X X X X X
	10	AN N N N N N N N N N N N
Task 3:Optimization of the	12	^X X X X X X X X X X X ^
Tool	months	
	_	
Task 4: Fabrication of the	8	
Tool	months	^X X X X XX X X^
Task 5: Report Preparation	1 month	
		^X^

Resources List Key Personnel by Name Provide levels of effort in person-months including consultants and subawardees.	Estimate Total Months Effort for entire Project	Reporting Period 0-6 months	Reporting Period 6-12 months	Reporting Period 12-18 months	Reporting Period 18-24 months	Actual for the Entire Project
Terry Demo	4	1	1	1	1	4
Frederick Scott	1.5		0.5	0.5	0.5	1.5
Joseph Smith	1.5	0.5		0.5	0.5	1.5
Technicians:						
Gary Scott & Mary Lee	6.0	1.0	2.0	1.0	2.0	6.0
Subawardee - JHU	8.5	3	3	1.25	1.25	8.5
Expenditures Provide dollar amount for: Key Personnel, Consultants, Subawardees, Permanent Equipment, & Other (List by name)	Estimate Total \$ for Entire Project	Reporting Period 0-6 months	Reporting Period 6-12 months	Reporting Period 12-18 months	Reporting Period 18-24 months	Actual \$
Terry Demo	\$80,000	\$20,000	\$20,000	\$20,000	\$20,000	\$80,000
Frederick Scott	\$37,500	\$ 7,500	\$ 7,500	\$10,000	\$12,500	\$37,500
Joseph Smith	\$33,750	\$ 7,500	\$ 7,500	\$ 8,750	\$10,000	\$33,750
Technicians	\$ 3,750	\$ 3,750	\$ 3,750	\$ 3,750	\$ 3,750	\$15,000
Randolph Macon (subawardee)	\$25,000	\$10,000	\$10,000	\$ 2,500	\$ 2,500	\$25,000
Thomas Payne (subawardee)	\$27,000	\$ 9,000	\$ 9,000	\$ 4,500	\$ 4,500	\$27,000
Graduate Students	\$30,000	\$10,000	\$10,000	\$ 5,000	\$ 5,000	\$30,000
Travel (abc)	\$ 4,000		\$ 2,000		\$ 2,000	\$ 4,000

Travel (subawardee)	\$ 4,000		\$ 2,000		\$ 2,000	\$ 4,000
Consultant (Dr. Snow)	\$11,420	\$ 2,855	\$ 2,855	\$ 2,855	\$ 2,855	\$11,420
Materials (abc)	\$ 8,500	\$ 3,500		\$ 2,500	\$ 2,500	\$ 8,500
Materials (subawardees)	\$19,000	\$15,000		\$ 4,000		\$19,000
Other (testing) -abc	\$60,000	\$25,000	\$25,000	\$10,000		\$60,000
Other (testing) – subawardees	\$10,000	\$ 5,000	\$ 5,000			\$10,000
Equipment	\$14,000	\$ 6,500	\$ 7,500			\$14,000
abc indirect costs	\$51,105	\$21,900	\$21,900	\$27,975	\$27,975	\$51,105
abc fee	\$30,118	\$ 7,529	\$ 7,529	\$ 7,530	\$ 7,530	\$30,118
TOTALS	\$460,39	\$155,034	\$141,534	\$109,360	\$103,110	\$460,393
	3					

- 4. Commercialization Plan (cannot exceed 15 pages -- excluding letters of support). Follow the instructions for the Commercialization Plan (CP). Note that the CP is a critical component of the proposal. The plan must have the following sections: Market Opportunity, Company/Team, Product/Technology and Competition, and Finance and Revenue Model. For complete details reference: http://www.nsf.gov/eng/iip/sbir/commplan06.htm
- **5.** Company Commercialization History. This section must be included, if you have ever received a Phase II award; failure to provide this section will render your proposal as "inappropriate" and the proposal will not continue through the review process.

Firm Name):							
abc inst.								
Year Com	any Foun	ded:						
2000								
Identify an	y name ch	ange your firr	n has g	one thre	ough within the	past five	years:	
None								
List the pa are a pare			a subsi	diary o	r a spin-off. Lis	st subsidia	ries and spin	-offs if you
None								
funding (ir	cludes Ph	any revenues ase I and Pha s; and 2008: 20	se II aw		past three (3) f	iscal year	s from federal	SBIR/STTR
	ist each P	hase II SBIR/S	STTR aw	ard be	low and fill out	the reque	sted informat	ion.
L						Sales,		

				(Date)	supplements)	Licensing Revenues	Amount	(Third- Party) Investment Amount
0401223	NSF	Phase II Rapid Prototyping	2004	2006	\$500,000.	\$1,000,000	\$500,000	\$10,000,000
0500123	DOE	Phase II New Materials for Fuel Cells	2005	2007	\$750,000	\$7,000,000	\$0	\$1,000,000
0712345	NASA	Phase II Materials for Harsh Environments	2007	2009	\$750,000	\$1,000,000	\$5,000,000	\$0
TOTALS					\$2,000,000	\$9,000,000	\$10,000,000	\$11,000,000

- **6. Letters of Support**. If you have letters of support or endorsement you are permitted to include up to 3 letters.
- 7. Letter(s) regarding human subjects Institutional Review Board or IACUC approval of animal use. If the project requires human or animal subjects, the company provide the appropriate documentation.
- **8.** Cooperative Research Agreement (For STTR ONLY). Upload a PDF file with an updated CRA or a letter from the research institution stating that the terms of the Phase I CRA apply to the Phase II project

Click on **GO** BACK button to return to the Form Preparation Screen. If you are ready to submit, or ending your FastLane session, Scroll down and click on **GO** BACK button, The Proposal Actions screen will appear.

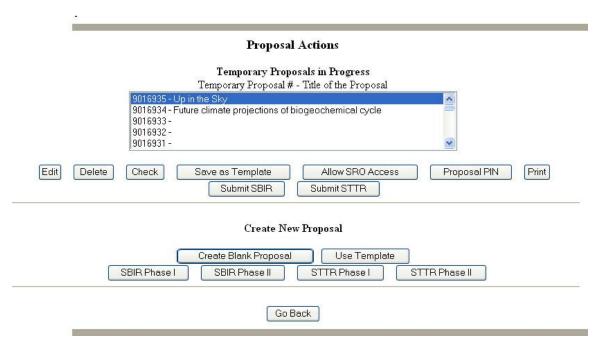
Proposal Submission Procedures

The next steps are very IMPORTANT! If you have completed all the above actions you are now ready to submit your proposal. If you want to print out your proposal before moving to the submission and printing section below, return to the Proposal Actions screen and click on the Print button. This will give you a copy of what you have entered into FastLane. (Note: this is not your official proposal).

STEPS FOR SUBMITTING AND PRINTING YOUR SBIR/STTR PHASE II
PROPOSAL IMPORTANT: If you have SRO Access Rights you can use the
"Submit SBIR/STTR" button. If you do not see the Submit SBIR/STTR
button then you do not have the FastLane Contact/SRO Access Rights,
please follow the directions below!

Submitting a proposal to NSF involves two steps in Research Administration:

- * Submitting the proposal to NSF
- * Electronically signing the proposal
- 1. To begin the submission process return to the Proposal Actions screen; select and highlight the proposal you wish to submit and click on "**Allow SRO Access**".
- 2. A screen appears with three options (If you are ready to begin the submission process, select the third *Go* button, Allow SRO to view, edit and submit proposal. The other two *Go* buttons allow you to only view the proposal but not submit or to view and edit but not submit the proposal. Click on the third *Go* button to allow the SRO to actually submit the proposal to NSF. A message will appear, "The SRO now has complete access to proposal <your temporary number>. Click on the *OK* button.



SRO ACCESS STEPS

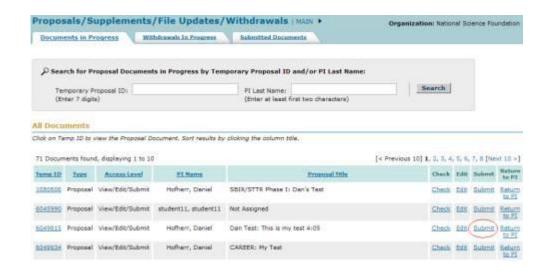
1. Go to the FastLane Home Page and select Research Administration link.



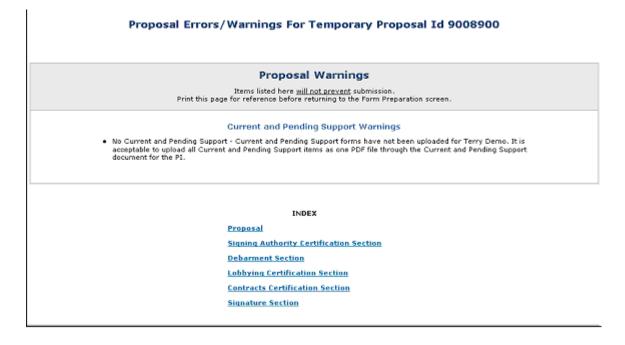
- 2. The authorized organizational representative will be asked to provide the following Log-in information:
 - Last Name
 - NSF ID
 - Password



3. Click **Proposals/Supplements/File Updates/Withdrawals**. The **Proposals/Supplements/File Updates/Withdrawals** screen displays on the **Documents** in **Progress** tab



4. Click **Submit** in the row for the proposal you want to submit. The **Proposal Errors/Warnings** screen displays giving you the capability to submit the proposal, if there are no errors that prohibit submission.



- **5.** Two options Submit the Proposal Only or Submit and Sign the Proposal. The steps below are for the Submit and Sign the Proposal.
- If you are an SPO with AOR permissions, you have the capability to submit and sign the proposal.

- 5.1. In the **Debarment and Suspension** section of the **Proposal Errors/Warnings** screen, click the radio button for Yes or No if there are any debarments or suspensions of you or of your organization from transactions with federal agencies.
- 5.2. *If you answered Yes,* in the text box under the radio buttons, type an explanation.

Debarment and Suspension Certification
Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transaction by any Federal department or agency?
No Yes (If "yes" please provide an explanation below.)
By electronically signing the NSF Proposal CoverSheet, the Authorized Organizational Representative or Individual Applicant is providing the Debarment and

5.3. In the **Institution Information** section of the **Proposal Errors/Warnings** screen, check the accuracy of the information for your organization.



5.4. At the bottom of the **Proposal Errors/Warnings** screen, click the **Sign and Submit** button. The **Proposal Submission Confirmation** screen displays with a message that the proposal has been successfully submitted to NSF. It also displays the official NSF number for the proposal.

PROPOSAL SUBMISSION CONFIRMATION	
Proposal 9008911 has been successfully submitted to N	SF
This proposal has now been assigned the following NSF Proposal Number: 0612913	
Please make a note of this number, it is the official NSF proposal number. Your Signature has been recorded	
DK	

- 5.5. Write down the NSF proposal number.
- 5.6 Click the **OK** button. The **Proposals/Supplements/File Updates/Withdrawals** screen displays on the **Documents in Progress** tab.